Title (en)
Generating and processing of CDMA signals

Title (de)
Erzeugung und Verarbeitung von CDMA-Signalen

Title (fr)
Génération et traitement de signaux AMRC

Publication
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Application
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Priority
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Abstract (en)
[origin: EP2701323A1] The invention relates to a method for generating a CDMA signal s(t) comprising N components, by assigning to each of the N components one unique spreading sequence a n and modulating the symbols d n of each component on the assigned unique spreading sequence a n (S10), and combining the N symbols d n each being spread to a CDMA signal s(t) (S12), wherein the assigned spreading sequences a n are selected such that all selected pairs within the set of N spreading sequences are orthogonal or very close to be orthogonal. A constraint on the transmitted symbols defines that the symbols of the components are selected to fulfill a predefined condition, for example that the product of all symbols for each time instance is a constant value over a certain period of time assuming that all modulated components have the same symbol duration. For example, if binary symbols with values +1 or -1 are used, the constraint may define that the product of all symbols for each time instance is either +1 or -1, per convention, over a certain period of time. The invention also relates to a corresponding receiver. Application to GNSS, especially Galileo.

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